Name:

at1110paper_practice_test (v3)

1. Expand the following expression into standard form.

$$(9x + 2)(5x - 7)$$

$45x^2 - 63x + 10x - 14$

$45x^2 - 53x - 14$

2. Solve the equation.

$$(7x + 3)(5x - 2) = 0$$

$x = \frac{-3}{7}$ $x = \frac{2}{5}$

3. Expand the following expression into standard form.

$$(3x + 7)(3x - 7)$$

$9x^2 - 21x + 21x - 49$

$9x^2 - 49$

4. Expand the following expression into standard form.

$$(4x + 5)^2$$

$16x^2 + 20x + 20x + 25$

$16x^2 + 40x + 25$

5. Factor the expression.

$$x^2 - 2x - 48$$

$$(x+6)(x-8)$$

6. Factor the expression.

$$49x^2 - 36$$

$$(7x-6)(7x+6)$$

7. Solve the equation with factoring by grouping.

$$20x^2 - 15x - 8x + 6 \;=\; 0$$

$$(5x-2)(4x-3) = 0$$

$$x = \frac{2}{5} \qquad x = \frac{3}{4}$$

8. Solve the equation.

$$8x^2 + 9x - 13 \;=\; 3x^2 + 5x - 4$$

$$5x^2 + 4x - 9 = 0$$

$$(5x+9)(x-1) = 0$$

$$x = \frac{-9}{5} \qquad x = 1$$